

LEAF-BUD CUTTINGS

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Why leaf-bud cuttings? The main purpose of leaf-bud cuttings is to produce as many new plants as possible from a limited stock material. They are slower than stem tip cuttings in that they take longer to produce a mature plant but they can be produced in large numbers.

A leaf-bud cutting, as its name suggests, consists of a leaf blade, petiole or leaf stem, an axillary bud plus a small portion of the stem. In actual fact a leaf-bud cutting is a miniature softwood cutting.

It is important when taking these cuttings, as with any cuttings, to select healthy disease-free stock plants. A cutting from a poor quality stock plant will produce an inferior quality new plant. It is also important to select mature tissue, i.e. leaves and petioles which have a mature axillary bud or axillary shoot primordia capable of producing shoots in a relatively short time. However, although they should be mature, the cuttings should be made from relatively young, healthy growth, as cuttings from old growth will take longer to develop roots and the axillary bud may die before the roots develop.

In the actual taking of the cutting the amount of stem retained is usually quite small depending on the subject being propagated. The stem section can be left whole or it can be cut longitudinally which, if the leaf arrangement is opposite, will produce two cuttings from one node. Even if the leaf arrangement is alternate the stem section can still be cut in the same manner exposing more of the root-producing tissue to the rooting medium.

After leaf-bud cuttings have been made they are subject to the same environmental conditions for rooting as stem cuttings. They should be treated with a rooting aid, "Seradix B I," and set in a medium consisting of 1 part peat and 2 parts fine pumice.

We have found from our own experience that this mix is very satisfactory. The medium should be placed in a small tray or container and then placed in a propagating frame with bottom heat which should be set at between 75°-80° F. As our propagating frame does not have a mist system we syringe the cuttings overhead frequently. Adequate moisture while the cuttings develop roots is very important.

A selection of plants that can be propagated in this manner includes:

Aphelandra squarrosa

Fatshedera lizei

Fatshedera lizei 'Variegata'
Philodendron sp.
Peperomia sp.
Codiaeum (crotons)
Rhaphidophora aurea [*Scindapsus aureus*]
Ficus elastica 'Decora' (plus other species and varieties)
Cissus (kangaroo vine)
Rhoicissus (grape ivy)

It should be noted that most of the above plants can be propagated by tip cuttings but to obtain the maximum number of cuttings from the minimum amount of stock, propagation by leaf-bud cuttings is practised.

J. WELLS: In one New Zealand nursery I visited I saw leaf-bud scions being placed onto an easily-rooting cuttings, treated with hormone, put into the propagator and rooted. The subject was *Rhododendron* and the idea was to build up stock rapidly.

P. BATES: Was the old bud cut out or rubbed out of the *Rhododendron*?

J. WELLS: Cut out with a slicing action.

P. BATES: On camellias, with leaf-bud cuttings you get beautifully shaped plants.

E. J. MARTIN: In using hormones do you take precautions to avoid getting it on the bud?

R. SCOTT: Yes, I endeavour to keep it limited to the cut surfaces of the cutting.

PROPAGATION OF DAPHNES

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In the R.H.S. Dictionary over 35 species of *Daphne*, both evergreen and deciduous are described. I will concentrate my remarks on one of these species; in fact, to a cultivar known as *Daphne odora* 'Rubra.'

Stock Plants — I consider the key to *D. odora* 'Rubra' production is healthy vigorous stock. Selected plants are set out in the best piece of nursery land and grown for two years before being used for cuttings. These stocks are maintained from 5 to 7 years before removal and replacement by fresh plants. Below a soil pH of 6, growth is restricted. Good results are achieved with a pH of between 6 and 6.4. A balanced fertilizer applied in early spring and again after the cuttings are removed (late summer) maintains growth.